

DETAILED ACTION

The Amendment filed on February 22, 2010 has been considered.

Claim Objections

Claims 4, 5, 7-10, and 20-26 are objected to because of the following informalities:

Claims 4 and 9, "said flexural stiffnesses are" (line 1) should be "said current flexural stiffness is".

Claims 5, 6, and 21, "said flexural stiffnesses" (line 5) should be "said current flexural stiffness".

Claims 7 and 23, "model" (line 4) should be deleted.

Claim 8, "the input" (line 8) should be – an input --.

Claim 10, before "flexural" (line 6) should insert – current --.

Claims 20 and 26, "said flexural stiffnesses" (lines 1-2) should be "said current flexural stiffness".

Claim 24, "the input" (line 9) should be – an input --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 8, 23, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: claim 7, step(s) to tie the identifying constants step with other steps; claim 8, step(s) to tie the determining measurement frequencies of interest step, performing a crest factor minimization step, defining a total measurement time step, and the defining a total number of averages step, respectively, with each other or with other steps.

Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: claim 23, structural relationship(s) between the means for identifying constants with other means; claim 24, structural relationship(s) between the means for determining measurement

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frequencies of interest, means for performing a crest factor minimization, means for defining a total measurement time, and means for defining a total number of averages, respectively, with each other or with other means.

Allowable Subject Matter

Claims 7, 8, 23, and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 4-6, 9-16, 20-22, 25, 26, and 30-33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 1-3, 17-19, and 27-29 are allowed.

Reasons For Allowance

The **combination** as claimed wherein a method and system for validating a flow calibration factor of a flow meter comprising determining a current flexural stiffness of a flow meter component from a flow meter vibrational displacement produced in response to application of a predetermined force to one or more flow tubes of the flow

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meter (claims 1, 17) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cage et al. (US 5,576,500) discloses a Coriolis mass flow rate meter wherein the amount of deflection of flow conduit (101) from a given Coriolis force distribution is related to the stiffness of the flow conduit (101). However, Cage et al. does not disclose detecting a calibration error condition responsive to comparing an initial flexural stiffness with a current flexural stiffness.

Normen (US 6,678,624) discloses determining a calibration factor for a sensor as a function of stiffness (step 530, Fig. 5). However, Normen does not disclose the

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calibration factor is based on comparing an initial flexural stiffness with a current flexural stiffness.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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/Michael P. Nghiem/

Primary Examiner, GAU 2863

May 21, 2010